PATENT

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for mitigating adjacent channel interference (ACI) in

a wireless communication system, comprising:

determining a presence or absence of ACI in each of one or more frequency ranges in a

pre-processed signal comprised of a desired signal component, wherein the presence or absence

of ACI in the pre-processed signal is determined via signaling from a transmitter;

selecting a particular filter response from among a plurality of possible filter responses

based on the determined presence or absence of ACI in each of the one or more frequency

ranges; and

filtering the pre-processed signal with the selected filter response.

Claims 2-8. (Cancelled)

9. (Original) The method of claim 1, wherein the plurality of possible filter responses

are provided by a plurality of sets of filter coefficients.

10. (Original) The method of claim 9, wherein the plurality of sets of filter coefficients

are for a finite impulse response (FIR) filter.

11. (Original) The method of claim 1, wherein the plurality of possible filter responses

include a first filter response selected for use if ACI is determined to be present at an upper band-

edge of the desired signal component.

12. (Original) The method of claim 1, wherein the plurality of possible filter responses

include a second filter response selected for use if ACI is determined to be present at a lower

band-edge of the desired signal component.

Attorney Docket No.: 010495

Customer No.: 23696

2

- 13. (Original) The method of claim 1, wherein the plurality of possible filter responses include a third filter response selected for use if ACI is determined to be present at both an upper band-edge and a lower band-edge of the desired signal component.
- 14. (Original) The method of claim 1, wherein the plurality of possible filter responses include a fourth filter response selected for use if ACI is determined to be absent from the preprocessed signal.
- 15. (Original) The method of claim 1, wherein each of the plurality of possible filter responses is derived to maximize signal-to-noise-and-interference ratio (SINR) based on a respective hypothesis for the ACI in the pre-processed signal.

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16. (Original) The method of claim 15, wherein each hypothesis is indicative of a hypothesized location and spectral profile for the ACI in the pre-processed signal.

Claims 17-28. (Cancelled)

29. (Currently Amended) A receiver apparatus in a wireless communication system, comprising:

means for pre-processing a received signal comprised of a desired signal component;
means for determining a presence or absence of adjacent channel interference (ACI) in
the pre-processed signal in each of one or more frequency ranges, wherein the presence or
absence of ACI in the pre-processed signal is determined via signaling from a transmitter; and

means for filtering the pre-processed signal with a particular filter response selected from among a plurality of possible filter responses based on the determined presence or absence of ACI in each of the one or more frequency ranges.

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